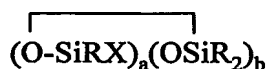


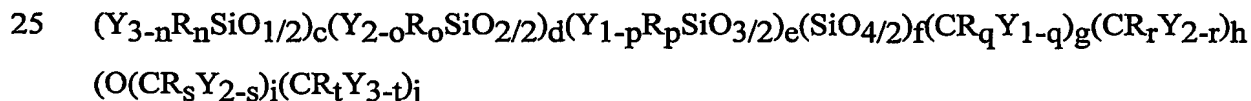
## CLAIMS

1. A solventless pressure sensitive adhesive (PSA) comprising (A) at least one organosiloxane polymer having on average at least two aliphatic unsaturations per molecule;  
5 (B) at least one resin having  $R_3SiO_{1/2}$  (M units) and  $SiO_{4/2}$  (Q units) where each R is an independently chosen monovalent hydrocarbon group free from aliphatic unsaturation and comprising 1 to 20 carbon atoms; (C) at least one reactive diluent; (D) at least one Si-H containing crosslinker comprising an organohydrogensilicon compound having on average at least two silicon bonded hydrogen atoms per molecule; (E) at least one hydrosilylation  
10 catalyst; and (F) optionally at least one inhibitor.
2. The solventless PSA of claim 1 comprising (A) 15 to 40 weight percent of at least one organosiloxane polymer having on average at least two aliphatic unsaturations per molecule; (B) 50 to 80 weight percent of at least one resin having  $R_3SiO_{1/2}$  (M units) and  $SiO_{4/2}$  (Q  
15 units) where the M:Q ratio is from 0.6:1 to 1.9:1 and each R is an independently chosen monovalent hydrocarbon group free from aliphatic unsaturation and comprising 1 to 20 carbon atoms, (C) 2 to 7 weight percent of at least one reactive diluent; (D) at least one Si-H containing crosslinker comprising an organohydrogensilicon compound; (E) at least one hydrosilylation catalyst; and (F) optionally at least one inhibitor, .  
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3. The solventless PSA of claim 1 or 2 where Component (A) is chosen from hexenyldimethylsiloxyl-terminated polydimethylsiloxane-polymethylhexenylsiloxane copolymers, hexenyldimethylsiloxyl-terminated polydimethylsiloxane polymers, vinyl dimethylsiloxyl-terminated polydimethylsiloxane polymers, vinyl or  
25 hexenyldimethylsiloxyl-terminated poly(dimethylsiloxane-silicate) copolymers, mixed trimethylsiloxyl-vinyl dimethylsiloxyl terminated poly(dimethylsiloxane-vinyl methylsiloxane-silicate) copolymers, and vinyl or hexenyldimethylsiloxyl terminated poly(dimethylsiloxane-hydrocarbyl) copolymers having a viscosity from 150 to 499 mPa.s at 25°C.
- 30 4. The solventless PSA of any of claims 1 to 3 where component (D) is chosen from (D1) diorganohydrogensiloxyl-terminated polydiorganosiloxane polymers, diorganohydrogensiloxyl-terminated polyorganohydrogensiloxane polymers,

diorganohydrogensiloxy-terminated polydiorganosiloxane-polyorganohydrogensiloxane copolymers, triorganosiloxy-terminated polydiorganosiloxane-polyorganohydrogensiloxane copolymers, triorganosiloxy-terminated polyorganohydrogensiloxane polymers where the organo substituent on these organohydrogensiloxanes comprises a monovalent hydrocarbon group having from 1 to 20 carbon atoms; (D2) an organohydrogensiloxane reaction product having a viscosity of from 150 to 50,000 mPa.s obtained by mixing: (a) at least one organohydrogensiloxane containing at least three silicon-bonded hydrogen groups per molecule, (b) at least one compound containing at least two alkenyl groups per molecule, and (c) a platinum group metal-containing catalyst which is present in an amount sufficient to provide 0.1 to 10 weight parts of platinum group metal per million weight parts of (a)+(b), with the proviso that the ratio of the number of silicon-bonded hydrogen atoms of Component (a) to the number of alkenyl groups of Component (b) is at least 4.6:1; and (D3) an organohydrogensiloxane containing at least two silicon-bonded hydrogen atoms per molecule described by formula (II):

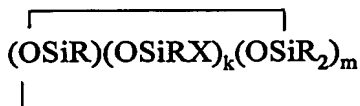


where each R is independently selected from a hydrogen atom and a monovalent hydrocarbon group comprising 1 to 20 carbon atoms which is free from aliphatic unsaturation, a is an integer from 1 to 18, b is an integer from 1 to 19, a + b is an integer from 3 to 20, each X is an independently selected functional group selected from a halogen atom, an ether group, an alkoxy group, an alkoxyether group, an acyl group, an epoxy group, an amino group, or a silyl group, or a -Z-R<sup>4</sup> group, where each Z is independently selected from an oxygen and a divalent hydrocarbon group comprising 2 to 20 carbon atoms, each R<sup>4</sup> group is independently selected from -BR<sub>u</sub>Y<sub>2-u</sub>, -SiR<sub>v</sub>Y<sub>3-v</sub>, or a group described by formula (III):



where B refers to boron, each R is as described above, the sum of c+d+e+f+g+h+i+j is at least 2, n is an integer from 0 to 3, o is an integer from 0 to 2, p is an integer from 0 to 1, q is

an integer from 0 to 1, r is an integer from 0 to 2, s is an integer from 0 to 2, t is an integer from 0 to 3, u is an integer from 0 to 2, v is an integer from 0 to 3, each Y is an independently selected functional group selected from a halogen atom, an ether group, an alkoxy group, an alkoxyether group, an acyl group, an epoxy group, an amino group, or a silyl group, or a Z-G group, where Z is as described above, each G is a cyclosiloxane described by formula (IV):



where R and X are as described above, k is an integer from 0 to 18, m is an integer from 0 to 18, k+m is an integer from 2 to 20, provided in formula (III) that one of the Y groups is replaced by the Z group bonding the R<sup>4</sup> group to the cyclosiloxane of formula (II), and provided further if g+h+i+j > 0 then c+d+e+f > 0.

5. The solventless PSA of any of claims 1 to 4 where the reactive diluent comprises at least one hydrocarbon compound comprising 8 to 18 carbon atoms and at least one aliphatic unsaturation.

6. The solventless PSA any of claims 1 to 5 where the reactive diluent comprises at least one alkene comprising 12 to 14 carbon atoms having a terminal double bond.

7. The solventless PSA any of claims 1 to 6 where the reactive diluent is tetradecene.

8. The solventless PSA any of claims 1 to 7 where the M:Q ratio of the resin (B) is from 0.6:1 to 1.9:1 and it contains no more than 1 weight percent silanol.

9. An article having on at least one surface the solventless PSA of claims 1 to 8.

10. The article of claim 9 where the article is chosen from polyester film, polyimide film, silicone rubber or foam, metal, glass impregnated cloth, paper or plastic coated paper, and fluorocarbon or fluorosilicone treated supports.